RESEARCH ARTICLE

Meanings Assigned by Primary Care Professionals to Male Prenatal Care: A Qualitative Study

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Abstract:

Background:
Considering recent strategies used in prenatal care, the involvement of fathers has been considered an important factor in ensuring that pregnancy and delivery are successful.

Objective:
The aim of this study is to identify the meanings assigned by primary health care professionals to male prenatal care.

Methods:
This is a descriptive study with a qualitative approach. A total of 19 interviews were conducted with primary health care professionals registered in the City Health Department of Teresina, Piauí, Brazil. Data were collected through semi-structured interviews and analyzed according to the Collective Subject Discourse methodology.

Results:
Three themes emerged from the reports’ analysis: The importance of the role of fathers in the gestational process, attitudes of men toward male prenatal care and formal education and training in primary health care. Health practitioners understand the importance of male prenatal care but reported they lack proper training to provide effective care.

Conclusion:
The expansion of continuing education strategies focusing on male prenatal care and directed to primary health care professionals is recommended to promote greater adherence on the part of fathers in prenatal care, with the purpose of strengthening bonds and improving the care provided to the entire family. The humanized care can facilitate the approach of the paternal figure during male prenatal care.

Keywords: Family health, Health education, Men’s health, Prenatal care, Primary health care, Health human resource training.

1. INTRODUCTION

The Brazilian Health Unic System (HUS) was created in 1990 in order to guide the delivery of healthcare by linking the different levels of care complexity. This system was based on the British National Health Service, which inspired the basic principles that define the HUS: universality, comprehensiveness, and being cost-free. The Family Health Program, created in 1994 within the sphere of the HUS and later called the Family Health Strategy (FHS), was intended to...
facilitate the transition of patients through the various levels of complexity, and ensure patients receive not only comprehensive care, but also the continuity of care, that is, a process in which a multi-professional team composed of a physician, nurse, nursing technician and community health agent, establish a partnership, avoiding fragmentation of care [1 - 3].

Prenatal care stands out among the care specialties addressed within the FHS and is provided by incorporating hospitable practices, establishing educational and preventive measures without unnecessary interventions, by early detecting pathologies or situations in which there is a gestational risk, by establishing bonds between the workers providing prenatal care and those who will assist delivery; and promoting easy access to quality health services to ensure efficient delivery of care [4, 5].

Considering recent strategies used in prenatal care, the involvement of fathers has been considered an important factor in ensuring that pregnancy and delivery are successful. Moreover, the involvement of men with health practices is considered a milestone to be reached in public health. According to recent studies, when fathers get involved in the process, the risk of premature birth, low birth weight, or fetal growth restriction is significantly reduced [6 - 10].

Concerning scientific evidence confirming the importance of male prenatal care that is established through the involvement of fathers in the care required during pregnancy, we stress the relevant role of healthcare workers, especially those within the FHS, in promoting the participation of fathers in the pregnancy process and in providing guidance. Note there is a lack of studies addressing the perspectives of workers in regard to male prenatal care; current studies only address the points of view of patients or their companions regarding the role of fathers in the gestational process [5, 11 - 13].

Therefore, health professionals must have appropriate training to prepare fathers for their transition to fatherhood and change of roles they probably will experience during pregnancy, as well as to provide information and strategies on how to construct and practice their parenting style [8]. Health professionals are key players in health care and benefit sustainable development. Thus, the objective of this study was to identify the meanings assigned by Primary Health Care (PHC) professionals to male prenatal care.

2. MATERIALS AND METHODS

2.1. Design

This is a descriptive study with a qualitative approach. This design was chosen based on the nature of the object of study, that is, meanings assigned by Primary Health Care professionals to training that focuses on male prenatal care. This study is also based on qualitative teaching assessment and health practices.

2.2. Setting and Participants

This study was conducted in Teresina, the capital and most populous and industrialized city in the state of Piauí, Brazil. According to official data, Teresina has a predominantly urban population composed of 850,198 inhabitants. It has an organized healthcare hub that is a reference center for primary, secondary and tertiary care in the northeast of the country [14].

This study included the Regional Health Coordinating Centers in the city’s center/north, east/southeast and south regions established by the Health Department in Teresina, PI. The region has 82 PHC units, and 226 Family Health teams, which cover 93% of the resident population [15].

A total of 19 interviews were held with PHC professionals: five dental surgeons, five community health agents, seven registered nurses, and two physicians. Fourteen of the participants were women aged 41 years old, on average. All participants were hired through public, competitive hiring processes and reported 11 years of experience within the FHS, on average.

Inclusion criteria were: having an academic education in the health field and having worked in PHC services for at least one year. We believe the longer one’s experience, the more relevant information one can provide regarding the object of study. Workers on sick leave or on vacation at the time of data collection were excluded.

The recruitment of participants was not guided by statistical representativeness but by the subjective accumulation of experiences participants acquired during their practice within the PHC sphere. The number of participants was determined by theoretical saturation; that is, as data were collected and analyzed, experiences considered to be relevant were more deeply analyzed, and the objective was gradually achieved [16].

2.3. Data Collection

In order to collect empirical data, interviews were held by a nurse/researcher with expertise in the topic and method used. This researcher was not affiliated with any of the facilities from which data were collected and had no relationships or ties established with the interviewees. The interview was guided by a semi-structured script, which was validated in a pilot-test, and addressed socio-demographic variables, such as sex, formal education, time since graduation, time working in PHC services, specialization studies, graduate studies and training programs addressing male prenatal care. The script also addressed the following: 1. Please tell me about the involvement of fathers in the gestational process; 2. What is your opinion about men taking part in male prenatal care?; and 3. Tell me about the aspects of your background/education that interfere in your professional practice concerning male prenatal care.

After attaining the participants’ consent, individual interviews were conducted from March to May 2016 at the beginning of the participants’ work shifts. Each interview lasted 35 minutes on average, totaling more than eleven hours of interviews. Even though the interviews were digitally recorded and transcribed, the confidentiality of the participants’ identities was ensured.

It is worth mentioning that the pilot study was used only with some PHC professionals to verify the adequacy of the questions listed in the semi-structured script. The questions were effective for the interviews. However, the results of the
pilot test did not make up the official results of this study.

2.4. Data Analysis

The methodological technique Collective Subject Discourse (CSD) was used to analyze empirical data. CSD is a qualitative technique used to represent collective thought through individual discourses; that is, selecting the most significant excerpts of each individual answer, represented by central ideas, synthesizing the manifested discursive content [17]. It is common, in this methodological procedure, to present data in the first person, as if it were the report of a single individual, which represents the collective. Three Collective Subject Discourses were obtained in this study: CSD 1, CSD 2 and CSD 3.

2.5. Ethical Considerations

The project of this study was authorized by the director of the Institutional Review Board at the City Health Department in Teresina, PI, Brazil on December 21st 2015, and the Institutional Review Board at the hosting Higher Education Institution also approved the project on February 22nd 2016 (CAAE No. 52885716.6.0000.5210 and report opinion No. 1.415.812).

This study complied with ethical and scientific guidelines concerning research involving human subjects according to the Helsinki Declaration [18] and Resolution No. 466/2012 of the Brazilian National Health Council [19].

The rigor of this qualitative study is based on the criteria: credibility, transferability, and reliability. Credibility concerns how data are interpreted, need to be substantiated. Therefore, the interpretation of the reports was discussed among all those in the research group, to verify the evidence found. Transferability refers to the access of readers to information necessary to specify the circumstances of analysis and the environment where the study was conducted. Reliability is related to the collection of satisfactory and sufficient data, which enabled the continuity of data collection and analysis to meet the objectives proposed. Note that the researchers’ prior knowledge did not interfere in the interpretation of data [20].

3. RESULTS

The health workers’ reports enabled the identification of central ideas and were organized into three themes that answer the objective (Tables 1-3).

Table 1. - Theme 1: The importance of the role of fathers in the gestational process.

<table>
<thead>
<tr>
<th>Central ideas:</th>
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<tbody>
<tr>
<td>- Psychological support to the mother;</td>
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<td>- Benefits for the infant’s development;</td>
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<td>- Parents’ interaction;</td>
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<td>- Prevention of sexually transmissible diseases;</td>
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<td>- Family planning;</td>
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<td>- Family bonds;</td>
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<td>- Inclusion and involvement of men in PHC services.</td>
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Table 2. - Theme 2: Attitudes of men toward male prenatal care.

<table>
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<th>Central ideas:</th>
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<tr>
<td>- Men seldom seek health services</td>
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<td>- Intrinsic thoughts</td>
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<td>- Influence of the historical masculine identity</td>
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<td>- Difficulty of access</td>
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<td>- Acceptance</td>
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<td>- Refusal</td>
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Table 3. Theme 3: Formal education and training in primary health care

<table>
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<tr>
<th>Central ideas:</th>
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<tr>
<td>- Lack of training focusing on this topic during undergraduate studies</td>
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<td>- General knowledge concerning male prenatal care</td>
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<td>- Difficulty implementing male prenatal care</td>
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<td>- Lack of qualification to provide this type of care;</td>
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<td>- Action strategies</td>
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<td>- Meanings assigned by workers regarding the implementation of male prenatal care</td>
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</table>
3.1. Collective Subject Discourse 1

The presence of the mother’s partner in the gestational process is extremely important because he can provide psychological support to her, understand how the baby develops, and also reaffirms his commitment to her. Prenatal care helps men understand and provide such care to the mother and baby, improving interaction with his partner. Male prenatal care is also extremely important because it provides information regarding the couple’s sexual relationship and sexually transmissible diseases, how to prevent them, how to treat themselves and their partners, considering, for instance, the high incidence of some diseases, such as syphilis, the incidence of which is currently very high. In psychological terms, affection, caressing, being together, being by his partner or wife’s side, help to change behavior and improving the family’s health condition, as mentioned previously.

It is very important to monitor the child’s development, and the more the father accompanies this process, the more he will be able to interact, and the better his relationship will be with the mother and child. If strategies were implemented to encourage men to attend the health unit, it certainly would enable them to have a better understanding of their own health, and it would be very important for the family context in terms of health education (CSD 1).

3.2. Collective Subject Discourse 2

There is a greater incidence of women than men. There is a culture we have to change, this low number of men seeking treatment and the fact they still have prejudices about it, based on their values. There are lots of factors that make it difficult to implement prenatal care with men, sociocultural factors, the fact they are not sensitized to its importance because men are more emotionally fragile than women. Therefore, these biopsychosocial factors end up negatively influencing the implementation of male prenatal care.

Men work and the working hours of our PHC units are not convenient for people who work. Most have to put food on the table, and the unit only opens during the day when they are in their working activities, so women have to attend consultations, not alone, but sometimes with some other relative. It has been observed that most fathers want to accompany their partners; many are concerned. However, even today, there are some silent fathers who do not come at all, and when they do, they are here only to bring their partners or are dragged by hand by their partners (CSD 2).

3.3. Collective Subject Discourse 3

At the time of my academic studies, there was no course addressing it [male prenatal care]. Courses addressed men’s health in general, but not male prenatal care specifically. We had no orientation on how to approach a man in regard to prenatal care, only gestation and the baby; men were left aside. We miss being able to approach, to devise strategies to bring men to health services. We know we have to update our knowledge, be prepared to better provide care, so, in regard to male prenatal care, there is a flaw in our daily work, because it is more focused on female prenatal care. Only recently, the foundation offered a short training program on male prenatal care.

They provided folders, informative material, there were meetings, and in the end, they provided us a program we were supposed to put into practice, and, from that day onwards, we found hypertension, diabetes mellitus and syphilis. It is very interesting when we put the male prenatal care actions into practice; we see it as a proposal that has everything necessary to improve the life of the couple and that of the child to come. We realize that these fathers feel appreciated and value the care we are providing (CSD 3).

4. DISCUSSION

Societies have, over time, witnessed a sociocultural transformation that has demystified the historical perception of the paternal figure, especially in terms of establishing effective bonds and expressing feelings toward children, which has contributed to greater involvement and participation from fathers in the gestational period.

In this context, the active participation of fathers during pregnancy and delivery is decisive for the establishment of a father-infant bond, even before birth, a situation that mothers are about to experience, and collaborates in a more dynamic process with fewer intercurrences. This greater involvement significantly benefits men because encourage self-care health workers can take advantage of this opportunity to provide primary care that concerns the men’s health, improving health indicators in this population [21].

In Brazil, the largest country in South America, rates concerning neonatal and infant mortality are high. A study carried out in cities in the North, Northeast and Southeast of Brazil found that most of the deaths of children under one year (66.9%) occurred in the neonatal period, 53.1% in the first six days of the child’s life. Of the total cases, 49.3% were preterm and 46.8% had low birth weight [22]. Therefore, the delivery of prenatal care requires more qualified and humanized attention on the part of healthcare workers, especially in developing countries, where there is little investment in the healthcare sector [23].

Therefore, male prenatal care emerges as an innovative strategy intended to promote the participation of fathers in the pregnancy and delivery processes. As shown in this study, the role of fathers can highly benefit this process, as their presence and support promotes the safety of mothers and babies, decreasing preventable risks during pregnancy and establishing an early bond between father and child.

Swedish studies addressing national data report that fathers who did not support their partners during early pregnancy remain distant even one year after birth. On the other hand, the early involvement of fathers during pregnancy prevented a lack of support to mother and child after birth. Moreover, the involvement of the father in a relationship permeated by care for the baby had a positive emotional effect, understood as union [12, 24].

Additionally, parents who provide relevant support to their babies may relieve potential stressors and acquire the knowledge and skills necessary to effectively care for their children [25]. Researchers propose that the mechanisms through which the fathers’ involvement influences birth
outcomes are essentially related to their presence and may impact maternal behavior and reduce maternal stress through emotional, logistic and financial support. Therefore, when preparing for fatherhood, men are encouraged to participate in various events during pregnancy [12, 23].

This study’s findings are in agreement with the literature showing there are basically two aspects that should be considered when addressing male prenatal care: that of public health and the individual aspect. In regard to public health, there is an opportunity to invite men into the service, which contributes to decreasing the incidence of congenital infections (syphilis, hepatitis, and HIV, among others), as well as to transmitting knowledge concerning self-care actions men are supposed to take during pregnancy. The individual aspect is that fathers are able to get involved in the process and more capable of meeting the mother’s needs and preparing to meet the needs of the coming child [26, 27].

Education to promote the knowledge of fathers concerning their rights and duties and what to expect during pregnancy is needed. The results of a given study showed that the majority of the men had highly felt needs for information about pregnancy, childbirth, and the postpartum period [28]. Men are not able to directly experience the biological and physiological aspects of pregnancy as women are; for this reason, their transition to fatherhood may be slower. This is a factor that should be considered by health workers to ensure that fathers are successfully introduced to prenatal care [29].

According to an Iranian study, paternal adaptation is related to a number of individuals, social and demographic factors [30]. Thus, the involvement of fathers in prenatal care depends on how well they are included in the process by the workers who are responsible for follow-up. Although professionals recognize the need to encourage the role of men as collaborators in the health of their partners, fathers still play a secondary role during prenatal care [12, 31].

Healthcare practitioners are aware of the numerous barriers imposed on both female and male prenatal care, which include personal barriers (e.g., family problems, domestic violence, lack of knowledge of where such care can be obtained, denial, lack of financial resources to pay for transportation, to pay a caregiver to take care of the family’s remaining children, lack of time) and problems on the part of healthcare providers or the system (lack of invitation and negative attitudes on the part of the staff, health units’ inconvenient working hours, long waiting times, infrastructure), which are not conducive to a healthy pregnancy [6, 32 - 36].

It is known that the key to successful consultations is the quality of the professional-patient relationship. Patients and multidisciplinary health teams should aim to establish a true partnership. Education and awareness strategies for men to become involved in maternal and child health are essential [10, 37, 38].

Health workers are fundamentals to providing knowledge for people and to providing efficacious answers concerning the health system. In addition to a need to establish a dialogue between professionals and patients, these workers also play a primary role in promoting the establishment of bonds between father, mother and child, considering that the role of fathers is to support the mother when she is physically and psychologically vulnerable. Fathers should be well-informed such that, even though the mother and child should not be disturbed, the father figure should be included in all of this pair’s daily actions [12].

Therefore, the role of health workers as facilitators of fathers’ participation is very important to overcome the idea that men are merely providers of material needs and bringing them to the point that they feel they are an essential part of the establishment of new ties. The relationship between practitioners and patients should be based on mutual understanding, as emotional support is crucial to facilitating interactions [5, 25, 37].

Health workers are supposed to be prepared to provide holistic care to both mothers and fathers, have a friendly gesture, a smile on their faces, in order to establish a viable relationship of trust and understanding when providing care [10]. Likewise, male participation should be encouraged to increase the chances that men will have routine clinical exams, value their role as fathers through male prenatal care, and by including men in family planning, facilitating access to services [31, 34, 39].

Hence, considering the well-known relevance of male prenatal care within PHC services, we verified in the reports of the health workers the meanings they assigned to training that focuses on this specific care. The participants expressed their doubts, a desire to improve, feelings of having insufficient knowledge, and willingness to expend effort to encourage the community to adhere to male prenatal care.

It is noteworthy that the implementation of male prenatal care is important for the goals of sustainable development, since the participation of parents in pregnancy represents an opportunity for health professionals to strengthen family health and child development. These aspects involve future generations and social awareness, as they are understood in social, cultural, economic and environmental dimensions.

4.1. Study Limitations

The limitations of this study include the fact that only workers from the PHC units located in a single city in the northeast of Brazil were included. Additionally, some potential participants were either on vacation or sick leave. These losses, however, did not compromise the development of this study because they were foreseen and accounted for in the exclusion criteria.

Conclusion

This study enabled identifying the following meanings assigned by PHC professionals: The importance of fathers adhering to male prenatal care and be aware that their wives/partners need their support during pregnancy; the attitude of men toward male prenatal care; difficulty implementing prenatal care due to ingrained male thought processes, which impede them from seeking primary health care services; deficient training of primary health care professionals, i.e., workers who provide male prenatal care lack
proper training and knowledge regarding how to address male prenatal care in the community.

The implementation of continuing education directed to the workers responsible for or involved in the delivery of prenatal care within the FHS is recommended in order to encourage men to take part in this process.

**RELEVANCE FOR CLINICAL PRACTICE**

Scientific and practical knowledge concerning the performance of PHC professionals during male prenatal care is intended to improve and facilitate the access of men to health services. Such access can enable the prevention of diseases in this population, preparing men for the role of being fathers, preparing them to assist their wives/partners during pregnancy, childbirth and postpartum, and aiding them in establishing healthy affective bonds with their children. The gestational process should not be experienced by women only; for this reason, health workers, including nursing professionals, should encourage the involvement of men during prenatal care, emphasizing the important role fathers can play and the support they can provide during the process, even improving the couple’s interaction. These benefits favor gender equality, human rights, knowledge and public health.

**AUTHORS’ CONTRIBUTIONS**

All authors listed meet the authorship criteria according to the latest guidelines of the International Committee of Medical Journal Editors, and approved this manuscript.

**ETHICS APPROVAL AND CONSENT TO PARTICIPATE**

The project of this study was authorized by the director of the Institutional Review Board at the City Health Department in Teresina, PI, Brazil on December 21st 2015, and the Institutional Review Board at the hosting Higher Education Institution also approved the project on February 22nd 2016 (CAAE No. 52885716.6.0000.5210 and report opinion No. 1.415.812).

**HUMAN AND ANIMAL RIGHTS**

No animals were used in this research. All human research procedures were followed in accordance with the ethical standards of the committee responsible for human experimentation (institutional and national), and with the Helsinki Declaration of 1975, as revised in 2013. This study complied with ethical and scientific guidelines concerning research involving human subjects according to the Brazilian National Health Council Resolution No. 466/2012 [19].

**CONSENT TO PARTICIPATE**

Informed consent was obtained from all participants.

**STANDARDS OF REPORTING**

COREQ guidelines and methodological were followed for this study.

**AVAILABILITY OF DATA AND MATERIALS**

The authors confirm that the data supporting the findings of the article is available in this article.

**FUNDING**

None.

**CONFLICT OF INTEREST**

The authors declare no conflict of interest, financial or otherwise.

**ACKNOWLEDGEMENTS**

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